PATENT

Application # 10/664,754

Attorney Docket # 2002P15652US01 (1009-039)

AMENDMENTS TO THE CLAIMS

1.   (Currently Amended) A method for representing HMI user screens comprising the activities of:

  via an information device:

          obtaining an organization and a hierarchy of a collection comprising a plurality of HMI screen nodes;

          automatically determining an arrangement of the collection;

          responsive to a detected collision between a parent node of said hierarchy of said collection and another node, automatically adjusting a position of said parent node; and

          rendering the collection according to the arrangement.

2.   (Original) The method of claim 1, further comprising calculating a position of a leaf.

3.   (Original) The method of claim 1, further comprising calculating a position of a visible leaf.

4.   (Original) The method of claim 1, further comprising calculating a position of a parent.

5.   (Original) The method of claim 1, further comprising detecting a collision.

6.   (Original) The method of claim 1, further comprising updating a position of a parent.

7.   (Original) The method of claim 1, further comprising updating a position of a parent upon detecting a collision.

8.   (Original) The method of claim 1, further comprising recursively calculating a position of each of the plurality of HMI screen nodes.

9.   (Original) The method of claim 1, further comprising recursively calculating a position of each of the plurality of HMI screen nodes and updating a position of a parent upon detecting a collision.

10.   (Currently Amended) The method of claim 1, further comprising changing ~~the~~ a visibility of a node.

11.   (Currently Amended) The method of claim 1, further comprising changing ~~the~~ a visibility of a node and children of the node.

12.   (Original) The method of claim 1, wherein the arrangement is a tree arrangement.

13.   (Original) The method of claim 1, wherein the arrangement is a vertical tree arrangement.

14.   (Original) The method of claim 1, wherein the arrangement is a horizontal tree arrangement.

15.   (Original) The method of claim 1, wherein the arrangement is rendered with equal inter-generational node spacing.

16.   (Original) The method of claim 1, wherein the arrangement is rendered with equal intra-generational node spacing.

17.   (Original) The method of claim 1, wherein the arrangement is rendered with each parent aligned centrally to all children of that parent.

18.   (Original) The method of claim 1, wherein the arrangement is rendered with all nuclear children separated equally.

19.   (Currently Amended) A machine-readable medium containing instructions for activities comprising:

obtaining an organization and a hierarchy of a collection comprising a plurality of HMI screen nodes;

determining an arrangement of the collection;

responsive to a detected collision between a parent node of said hierarchy of said collection and another node, automatically adjusting a position of said parent node; and

rendering the collection according to the arrangement.

20.   (Currently Amended) A device for providing a representation of user screens for an HMI comprising:

means for obtaining an organization and a hierarchy of a collection comprising a plurality of HMI screen nodes;

means for determining an arrangement of the collection;

a processor adapted to, responsive to a detected collision between a parent node of said hierarchy of said collection and another node, automatically adjust a position of said parent node; and

means for rendering the collection according to the arrangement.